In the Claims:

1. (Currently Amended) A method for dynamically determining a lock in a multiprocessor, comprising:

(a) maintaining first and second system-wide measures of read and write acquisitions; ~~and~~

(b) determining a lock based upon at least some of said measures;~~, wherein said determination of said lock is independent of a lock lifetime.~~

(c) acquiring said lock for a first processing unit responsive to said determination; and

(d) releasing said lock responsive to a change in at least some of said system-wide measures of read and write acquisitions, wherein the step of releasing said lock includes switching said first processing unit to a different lock.

2. (Previously Presented) The method of claim 1, wherein said lock is selected from the group consisting of: a distributed reader-writer lock, a centralized reader-writer lock, and an exclusive lock.

3. (Previously Presented) The method of claim 2, wherein said exclusive lock is selected from the group consisting of: a test and set lock, a test and test and set lock, a queued lock, a ticket lock, and a quad-aware lock.

4. Cancelled

5. (Previously Presented) The method of claim 1, wherein the lock is a distributed reader-writer lock, and wherein said determining step is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

6. (Original) The method of claim 5, wherein said determining step is further responsive to a

quantity of units in the system.

7. (Original) The method of claim 6, wherein said unit is selected from a group consisting of: a CPU, a thread, a processor, a transaction, a co-routine, a thread in a multi-threaded architecture, a NUMA module, and a task.

8. (Previously Presented) The method of claim 1, wherein the lock is a centralized lock, and wherein said determining step is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

9. (Original) The method of claim 1, further comprising maintaining a system-wide measure of read-hold duration.

10. (Original) The method of claim 9, wherein the step of maintaining a system-wide measure of read-hold duration includes maintaining a measure of read-hold duration by a unit.

11. (Original) The method of claim 10, wherein said unit is selected from a group consisting of: a CPU, a thread, a processor, a transaction, a co-routine, a thread in a multi-threaded architecture, a NUMA module, and a task.

12. (Previously Presented) The method of claim 9, wherein the lock is a centralized lock, and wherein said determining step is responsive to the system-wide measures of read acquisitions and read-hold duration.

13. (Previously Presented) The method of claim 9, wherein the lock is an exclusive lock and wherein said determining step is responsive to the system-wide measure of read-hold duration.

14. (Original) The method of claim 13, wherein said determining step is further responsive to the

system-wide measure of read acquisitions.

15. (Original) The method of claim 1, further comprising periodically updating at least some of said system-wide measures.

16. (Original) The method of claim 1, wherein at least some of said second system-wide measures are selected from a group consisting of: a digital filter, a weighted average, a sliding window average, a finite impulse response, and a central data structure.

17. (Currently Amended) A computer system comprising:

multiple processors;

first and second system-wide measures of read and write acquisitions of said processors; and

a lock manager adapted to select a lock for acquisition by a first processing unit responsive to at least some of said measures~~, wherein said lock selection is independent of a lock lifetime,~~ and to release said acquired lock responsive to a change in at least some of said measures, wherein said manager release of said lock includes a switch of said first processing unit to a different lock.

18. (Previously Presented) The system of claim 17, wherein said lock is selected from a group consisting of: a distributed reader-writer lock, a centralized reader-writer lock, and an exclusive lock.

19. (Previously Presented) The system of claim 18, wherein said exclusive lock is selected from a group consisting of: a test and set lock, a test and test and set lock, a queued lock, a ticket lock, and a quad-aware lock.

20. (Previously Presented) The system of claim 17, wherein the lock is a distributed reader-writer lock, and wherein said lock manager is responsive to the system-wide

measure of write acquisitions and the system wide measure of read acquisitions.

21. (Previously Presented) The system of claim 17, wherein the lock is a centralized lock, and wherein said lock manager is responsive to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

22. (Previously Presented) The system of claim 17, wherein the lock is a centralized lock, and wherein said lock manager is responsive to the system-wide measure of read acquisitions and a system-wide measure of read-hold duration.

23. (Previously Presented) The system of claim 17, wherein the lock is an exclusive lock and wherein said lock manager is responsive to a system-wide measure of read-hold duration.

24. (Currently Amended) In a multiprocessor system, an article comprising:

a computer-readable signal bearing medium;

means in the medium for maintaining first and second system-wide measures of read and write acquisitions; and

means in the medium for selecting a lock for a first processing unit responsive to at least some of said measures, and for releasing said lock responsive to a change in at least some of said system-wide measures of read and write acquisitions, wherein said means for releasing said lock includes switching said first processing unit to a different lock ~~wherein said means for selecting said lock is independent of a lock lifetime~~.

25. (Original) The article of claim 24, wherein the medium is selected from a group consisting of: a recordable data storage medium, and a modulated carrier signal.

26. (Previously Presented) The article of claim 24, wherein said lock is selected from a group consisting of: a distributed reader-writer lock, a centralized reader-writer lock, and an exclusive lock.

27. (Previously Presented) The article of claim 24, wherein the lock is a distributed reader-writer lock, and whercin said means in the medium for selecting a lock is responsive to the system-wide measure of writer acquisitions and the system wide measure of read-acquisitions.

28. (Previously Presented) The article of claim 24, wherein the lock is a centralized lock, and wherein said means in the medium for selecting a lock is response to the system-wide measure of write acquisitions and the system-wide measure of read acquisitions.

29. (Previously Presented) The article of claim 24, wherein the lock is a centralized lock, and wherein said means in the medium for selecting a lock is responsive to a system-wide measure of read acquisitions and a system-wide measure of read-hold duration.

30. (Previously Presented) The article of claim 24, wherein the lock is an exclusive lock and wherein said means in the medium for selecting a lock is responsive to a system-wide measure of read-hold duration.

31. (Original) The article of claim 24, wherein at least some of said second system-wide measures are selected from a group consisting of: a digital filter, a weighted average, a sliding window average, a finite impulse response, and a central data structure.